North Pacific Fishery Management Council

Richard B. Lauber, Chairman
Clarence G. Pautzke, Executive Director

605 West 4th Avenue
Anchorage, Alaska 99501

Mailing Address: P.O. Box 103136
Anchorage, Alaska 99510

Telephone: (907) 271-2809
FAX: (907) 271-2817

SUMMARY OF BERING SEA/ALEUTIAN ISLANDS GROUNDFISH FISHERY MANAGEMENT PLAN

(Revised May 14, 1993)

TABLE OF CONTENTS

SUMMARY
OF
BERING SEA/ALEUTIAN ISLANDS GROUNDFISH
FISHERY MANAGEMENT PLAN

The Bering Sea/Aleutian Islands Groundfish Fishery Management Plan (FMP) was implemented on January 1, 1982 and has been amended several times. Though not all amendments have been implemented as final regulations, those passed by the Council to date are incorporated in this summary to reflect the North Pacific Fishery Management Council's most current management of the foreign and domestic groundfish fisheries in the Bering Sea and Aleutian Islands. A history of amendments is at the end of this summary.

Boundaries and Regulatory Areas

The plan encompasses the Exclusive Economic Zone (EEZ) in that portion of the North Pacific Ocean adjacent to the Aleutian Islands which is between 170° W. and the U.S.-Russian Convention Line of 1867, and of the Eastern Bering Sea (Figure 1). The plan area is divided into two regulatory areas: (1) the Bering Sea composed of the EEZ portions of INPFC Fishing Areas I (Statistical Areas 511,512, 513, 514, 516, 517, 518 and 519), II (Statistical Areas 521 and 522), and III (Statistical Area 530) and (2) the Aleutian Islands or INPFC Area IV (Statistical Area 540) (Figure 2).

Participants, Stocks and Fishing Year

The plan covers all domestic and foreign fisheries for all finfish and marine invertebrates except salmonids, shrimps, scallops, snails, king crab, Tanner crab, Dungeness crab, corals, surf clams, horsehair crab, lyre crab, Pacific halibut, and Pacific herring. Harvest allocations and management are based on the calendar year.

Fishing year is defined as the period beginning midnight Alaska local time on January 1 and ending at midnight Alaska local time on December 31 of that year.

Fishing seasons for specific species may be set by regulatory amendment and may differ from the fishing year. For example, the fishing season for yellowfin sole, Greenland turbot, arrowtooth flounder, and other flatfish, starts May 1. Amendment 19 to the FMP delayed the opening for all trawl fisheries until January 20. Similarly, Amendment 14 to the FMP authorized the Council to divide the pollock TAC into roe (January 1 - April 15) and non-roe (June 1 - Dec 31) seasonal allowances.

Plan and Management Objectives

Primary Plan Objectives:

1. Promote conservation while providing for optimum yield.
2. Promote efficient use of fishery resources but not solely for economic purposes.
3. Promote fair resource allocation without allowing excessive privileges.
4. Use best scientific data available.

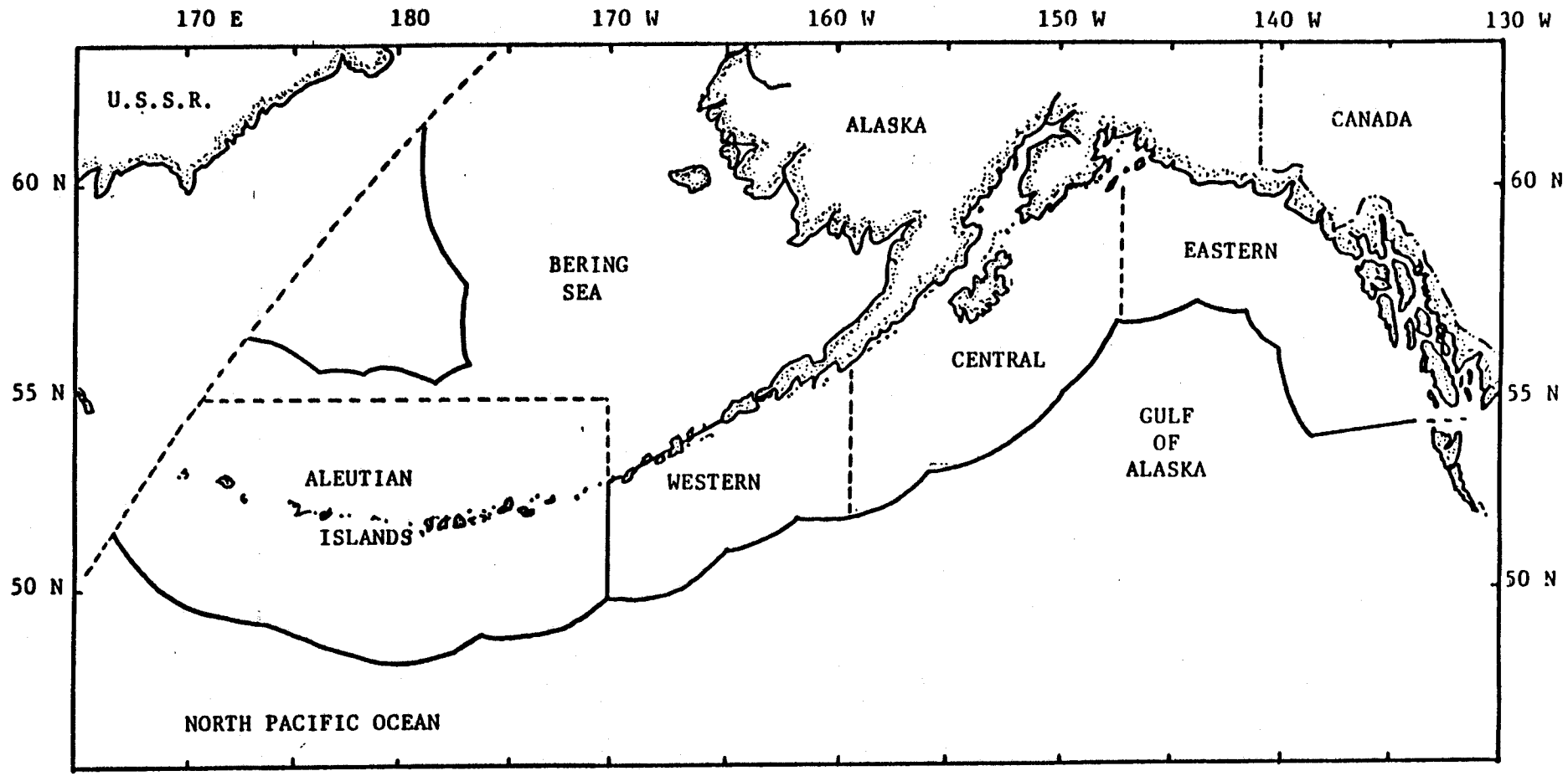


Fig. 1 Major regulatory areas of the Bering Sea and Aleutian Islands Groundfish and Gulf of Alaska Groundfish FMP's.

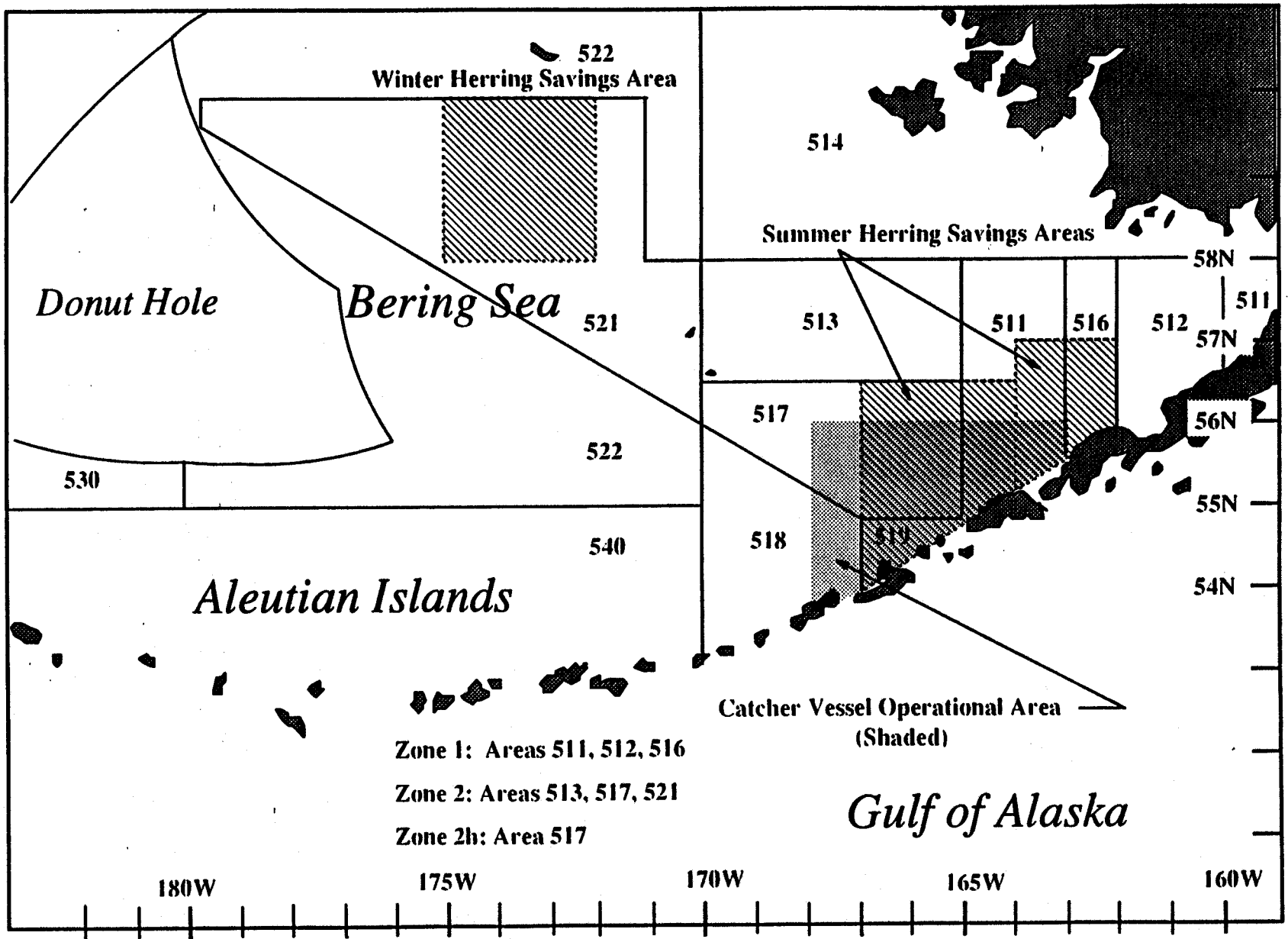


Figure 2. Statistical reporting areas and bycatch limitation zones in the Bering Sea and Aleutian Islands Management Area

Secondary Plan Objectives:

1. Conservation and management measures must be flexible enough to account for unpredictable variations in resource and industry.
2. Manage stocks throughout their range.
3. Promote rebuilding if stocks are less than Maximum Sustainable Yield.
4. Promote efficiency while avoiding disruption of existing social and economic structures.
5. Management measures should contain a safety margin in setting Acceptable Biological Catches when the quality of information concerning the resource and the ecosystem is questionable.
6. Minimize impacts of fishing strategies on other fisheries and environment.

Management Objectives:

1. Rational and optimal biological and socioeconomic use of resource.
2. Minimize impact on prohibited species and rebuild halibut stocks.
3. Provide for the orderly development of domestic groundfish fisheries consistent with objectives 1 and 2 at expense of foreign participation.
4. Provide for foreign fisheries consistent with objectives 1, 2 and 3.
5. Seek to maintain the productive capacity of the habitat required to support the groundfish fishery.

Operational Definitions

Acceptable Biological Catch (ABC) is a seasonally determined appropriate catch or range of catches. As a practical matter, it's upper bound is the F_{msy} fishing mortality rate applied to the exploitable biomass. The ABC may be set at a lower level to incorporate safety factors and risk assessment due to uncertainty.

Directed fishing means the retention on board a fishing vessel of a quantity of any groundfish species or species group in an amount equal to or greater than specified percentages of the total amount of fish and fish products on board, as calculated in round weight equivalents. The standards for directed fishing are specific to gear type and target species. These standards are detailed starting on page 13 of this summary.

Domestic Annual Harvest (DAH) is the estimated total harvest of groundfish by U.S. fishermen. It is delivered to U.S. or foreign processors or nonprocessed markets such as for bait for crab pots.

Domestic Annual Processing (DAP) is the estimated portion of the U.S. groundfish catch delivered to U.S. shorebased or floating processors or U.S. nonprocessed bait markets. It includes catches by U.S. factory trawlers.

Equilibrium Yield (EY) is the annual or seasonal harvest which maintains the resource at approximately the same level of abundance (apart from the effects of environmental variation) in succeeding seasons or years. It usually is different from MSY because the sustainable level of abundance is normally less than the maximum.

Joint Venture Processing (JVP) is the estimated portion of the U.S. groundfish catch that exceeds the capacity and intent of U.S. processors to utilize, or for which domestic markets are unavailable, that is expected to be delivered to foreign processors in the Exclusive Economic Zone.

Legal gear is defined in the regulations implementing the FMP.

Maximum Sustainable Yield (MSY) is an average, over a reasonable length of time, of the largest catch which can be taken continuously from a stock under current environmental conditions. It normally is presented with a range of values around its point estimate.

Optimum Yield (OY) is that which provides the greatest overall benefit to the nation with particular reference to food production and recreational fisheries. OY is based upon the maximum sustainable yield for a given fishery, modified by relevant economic, social or biological factors. It may be obtained by a plus or minus deviation from ABC for purposes of promoting economic, social or ecological objectives as established by law and the public participation process.

The definition of OY prescribes that the benefits of the fishery resources be allocated among all of the people affected by the fishery. These include commercial fishermen, processors, foreign fishermen, sport fishermen, distributors, consumers, governments, and a host of manufacturing and service industries. These groups usually have different and often conflicting ideas about the best use of the resources. Optimum yield then involves judgmental decisions that must be made by the Council based upon the best obtainable information.

Overfishing is defined as a maximum allowable fishing mortality rate. For any stock or stock complex under management, the maximum allowable fishing mortality rate will be set at the level corresponding to maximum sustainable yield (F_{msy}) for all biomass levels above that corresponding to maximum sustainable yield (B_{msy}). For lower biomass levels, the maximum allowable fishing mortality rate will vary linearly with biomass, starting from a value of zero at the origin and increasing to a value of F_{msy} at B_{msy}, consistent with other applicable laws. If data are insufficient to calculate F_{msy} or B_{msy}, the maximum allowable fishing mortality rate will default to other parameters as described in the FMP (Figure 3).

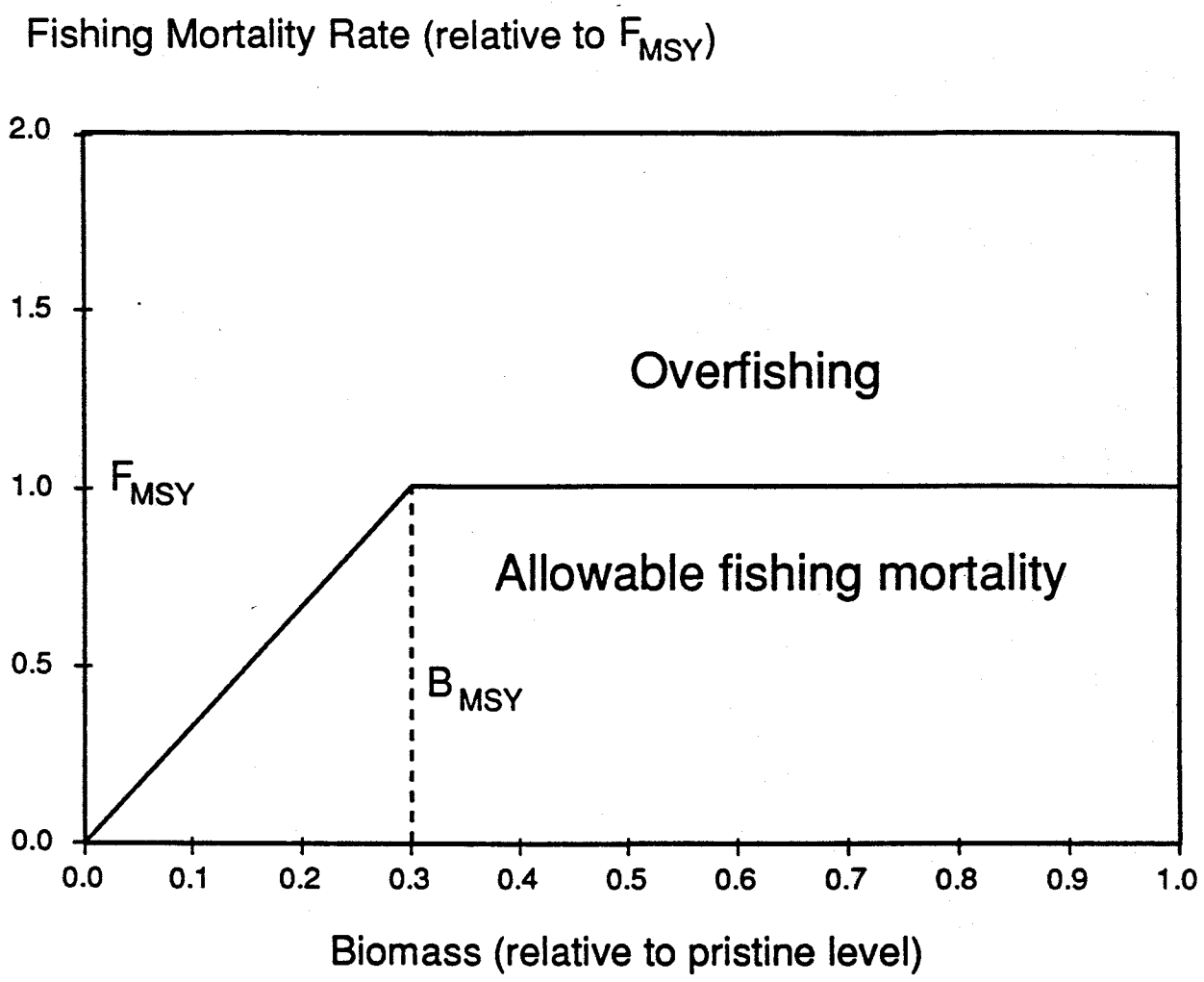
Reserve is a portion of the total allowable catch (15%) which is set aside at the beginning of the fishing (calendar) year for later allocations to DAH or TALFF.

Threshold is the minimum size of a stock that allows sufficient recruitment so that the stock can eventually reach a level that produces MSY. Implicit in this definition are rebuilding schedules. They have not been specified since the selection of a schedule is a part of the OY determination process. Interest instead is on the identification of a stock level below which the ability to rebuild is uncertain. The estimate given should reflect use of the best scientific information available. Whenever possible, upper and lower bounds should be given for the estimate.

Total Allowable Catch (TAC) is an annually determined catch which is species-specific and based on consideration of maximum sustainable yield, equilibrium yield, and optimum yield for the groundfish complex as a whole.

Total Allowable Level of Foreign Fishing (TALFF) is determined by deducting the expected domestic annual harvest from the total allowable catch and withholding reserves. This amount is made available by the U.S. Department of Commerce for harvest by other nations. The U.S. Department of State makes the actual allocations of those resources to other countries. The Act specifies that allocations must be based on past fishing history in the area, degree of cooperation in research and enforcement, whether the nation has trade barriers to our fish products or otherwise discourages trade of U.S.-caught fishery products, whether the nation fosters improvements in U.S. gear technology, and other guidelines deemed appropriate.

Figure 3


Fishing Mortality Rate (relative to F_{MSY})
2.0
1.5
1.0
0.5
0.0
Overfishing
F_{MSY}
Allowable fishing mortality
B_{MSY}
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Biomass (relative to pristine level)

Species Categories

Four categories of species or species groups are likely to be taken in the groundfish fishery. The optimum yield concept is applied to all except the "prohibited species" category. These categories are described as follows:

1. Prohibited species are those species and species groups the catch of which must be returned to the sea with a minimum of injury except when their retention is authorized by other applicable law. Foreign fisheries must maintain catch records. Groundfish species and species groups under this FMP for which the quotas have been achieved shall be treated in the same manner as prohibited species. Prohibited species include:

   Domestic
   Pacific halibut
   Pacific herring
   Salmonids
   King crab
   Tanner crab

   (Also includes numerous other invertebrates listed in Annex V of FMP.)

2. Target species are commercially important and generally targeted upon by the groundfish fishery. Sufficient data exist to specify total allowable catch (TAC) and to manage each species or species group separately. Catch records must be kept. Target species, as defined in the regulations, include:

Pollock	Other flatfish	Pacific Ocean perch
Sablefish	Other rockfish	Yellowfin sole
Pacific Cod	Atka mackerel	Arrowtooth flounder
Squid	Greenland turbot	Rock sole

   Target species, or species groups, may be combined or split by regulatory amendment.

3. Other species have little economic value and are not usually targeted upon, but they may be significant components of the ecosystem or have economic potential. A single TAC applies to this category as a whole. Catch records must be kept. Other species include:

Sculpin	Eulachon	Capelin	Shark
Skates	Smelt	Octopus	

4. Nonspecified species are those species and species groups of no current economic value taken by the groundfish fishery only as an incidental catch in the target fisheries. These species include those listed in Annex V. Virtually no data exist which would allow population assessments. No record of catch is necessary. The TAC for this category is the amount which is taken incidentally while fishing for target and other species, whether retained for discarded.

Determination of Total Allowable Catches

The groundfish complex is a distinct management unit and has more than 10 commercially important species and many others of lesser or no commercial importance. This complex forms a large subsystem of the Bering Sea ecosystem with intricate interrelationships between predators and prey, between competitors, and between those species and their environment. Therefore, the productivity and Maximum Sustained Yield (MSY) of groundfish are conceived for the groundfish complex as a unit rather than for many individual species groups. MSY for the complex, including the target and other species categories, is estimated to be 1.7 to 2.4 million mt and is the sum of individual species MSYs. This estimate is based on groundfish catches for 1968-1977.

Optimum Yield (OY) for the complex is set equal to 85% of MSY, or 1.4 to 2.0 million mt, plus such amounts of "nonspecified species" as may be taken incidentally. OY is set lower than MSY to reduce the risk associated with relying on incomplete data and questionable assumptions in assessment models used to determine stock conditions. A change in OY outside this range would require a plan amendment.

Total Allowable Catch (TAC) for each target species and for the "other species" category will be determined by the Alaska Regional Director of NOAA Fisheries by the end of the preceding fishing year. The sum of these TACs, or the TAC for the groundfish complex excluding nonspecified species shall be within the OY range of 1.4 to 2.0 million mt and is subject to the management measures prescribed in this FMP. TAC for the nonspecified species category is the amount taken incidentally to the harvest of target and "other" species.

Prior to the Regional Director's determination, the Council will recommend to him TACs for each target species and the "other species" category based on the best available data concerning the stocks and the fisheries. According to its annual groundfish cycle, the Council sets preliminary TACs in September, takes public comment in October and November, and finalizes the TACs in December for the upcoming fishing year.

Under Amendment 16 to the FMP, 25% of the preliminary groundfish specifications adopted in September go forward as interim specifications until superseded by publication of the final specifications in the Federal Register. This permits the groundfish fisheries to start on January 1, and for in-season management actions to take place, even if the publication of the final specifications is delayed past January 1.

The Regional Director shall make Council's recommendations together with proposed DAP, JVP, and TALFF, available to the public for comment. If the Council does not recommend TACs by December 15, the TACs already established shall automatically constitute the Council's recommendation to the Regional Director.

Council recommendations concerning TACs for the upcoming fishing year shall be based on the following:

1. Biological conditions of stocks as noted in an annual Stock Assessment & Fishery Evaluation (SAFE) prepared each year by the Plan Team with the assistance of NOAA Fisheries and other agencies. The SAFE shall contain historical catch trends, MSY and ABC estimates, assessments of harvest impacts, and alternative harvesting strategies. It is described in Annex I to the plan. The Council's SAFE policy is presented under Tab 11(m).

2. Socioeconomic considerations including promotion of efficiency, optimum marketable size of fish, impacts on prohibited species and dependent domestic fisheries, desire to enhance depleted stocks, seasonal access to the groundfish fishery by U.S. vessels, commercial importance to local communities, subsistence needs, and the need to promote utilization of certain species.

Status of Individual Species

The following summarizes the conditions of stocks of target and other species based on the most recent available survey data and analyses. The 1993 Acceptable Biological Catch (ABC) and Total Allowable Catch (TAC) levels are summarized in Table 1.

Walleye pollock: Pollock biomass in the eastern Bering Sea (EBS) is projected to be slightly below that which is expected to provide maximum sustainable yield (MSY). The decrease in recommended ABC from 1,490,000 mt to 1,340,000 mt for 1993 reflects this slight decrease in exploitable biomass. It is anticipated that an increase in ABC will occur after 1993. This is based on an anticipated increase in recruitment, following several years of below average recruitment. Large numbers of small pollock, presumably age 3 (1989 year class), have been reported in the 1992 fishery. Less is known of the dynamics of the stock in the Aleutian Islands region, but the best available information suggests that abundance is increasing moderately. Regarding the new Bogoslof District (518), directed fishing for pollock was not allowed in this area in 1992 and again in 1993 in an attempt to rebuild the Aleutian Basin pollock stock. The large catches removed from this international zone from 1986 - 1990 have fallen off due to the absence of continued recruitment to that stock.

Pacific cod: Pacific cod abundance in the EBS is near that which would yield MSY. The stock biomass remained high and stable throughout the 1980's, but 1990 - 1992 survey data indicate pronounced declines. This decline in biomass and the poor recruitment observed during the past three years has resulted in the reduction in ABC from 182,000 mt to 164,500 mt.

Yellowfin sole: Exploitable biomass, calculated from both cohort analysis and stock synthesis, is high and stable.

Greenland turbot: Continuous poor recruitment has been observed throughout the 1980s which indicates that biomass of the adult population is expected to decline well into the 1990s. Forecasts for a number of conservative fishing strategies, including no fishing, all show projected declines in biomass at least through 1993. The recommended ABC of 7,000 mt was set at a level approximating the low actual catch levels of recent years. This will allow retention of incidental catches and prevent wastage of the resource, but will discourage new efforts to target on this species.

Arrowtooth flounder: This resource is in excellent condition; biomass is high and continues to increase.

Rock sole: Rock sole biomass is high, stable and well above the level that would produce MSY. A large increase in ABC from 1992 reflects an increase in biomass. Observer data from 1990 and 1991 indicated that about one half of the rock sole caught were discarded.

Other flatfish: Exploitable biomass is high and stable. As with rock sole, the F_{msy} exploitation rate was applied to exploitable biomass to derive ABC.

Table 1. Bering Sea/Aleutian Islands Groundfish
Council Recommended Groundfish Specifications for 1993 (in metric tons)

Species	Area	Seasons\1	ABC	TAC	ITAC\2	Seasonal Allowances	DAP	CDQ\3
Pollock	EBS		1,340,000	1,300,000	1,105,000		1,105,000	97,500
		Roe			497,250	45%	497,250	43,875
		Non-Roe			607,750	55%	607,750	53,625
	AI	\4	58,700	51,600	43,860		43,860	3,870
	518		42,000	1,000	850		850	75
					0		0	
Pacific cod	BS/AI		164,500	164,500	139,825		139,825	
					0		0	
Yellowfin sole	BS/AI		238,000	220,000	187,000		187,000	
					0		0	
Greenland turbot	BS/AI		7,000	7,000	5,950		5,950	
					0		0	
Arrowtooth flounder	BS/AI		72,000	10,000	8,500		8,500	
					0		0	
Rock sole	BS/AI		185,000	75,000	63,750		63,750	
					0		0	
Other flatfish	BS/AI		191,000	79,000	67,150		67,150	
					0		0	
Sablefish	EBS		1,500	1,500	1,275		1,275	
	AI		2,600	2,600	2,210		2,210	
					0		0	
POP complex					0		0	
True POP	EBS		3,330	3,330	2,831		2,831	
Other POP complex	EBS		1,400	1,200	1,020		1,020	
True POP	AI		13,900	13,900	11,815		11,815	
Sharp/Northern	AI		5,670	5,100	4,335		4,335	
Short/Rougheye	AI		1,220	1,100	935		935	
					0		0	
Other rockfish	EBS		400	360	306		306	
	AI		925	830	706		706	
					0		0	
Atka mackerel	BS/AI		117,100	32,000	27,200		27,200	
					0		0	
Squid	BS/AI		3,400	2,000	1,700		1,700	
					0		0	
Other species	BS/AI		26,600	26,600	22,610		22,610	
					0		0	
BS/AI TOTAL			2,476,245	1,998,620	1,698,827		1,698,827	101,445

\1 Roe season for BSAI Pollock: January 20 to April 15.
Non-Roe Season, pending approval of a regulatory amendment: August 15 to December 31, otherwise will start June 1.

2\ Recommended TAC less the 15% Reserve

3\ CDQs equal half of the reserve for Pollock, or 7.5% of the BSAI pollock TAC.

4\ The Council did not divide the Aleutian Islands pollock TAC into roe and non-roe allowances.

Sablefish: Best available information indicates stocks in the EBS and AI are low and declining slightly. Biomass was estimated by calibrating relative abundance trends to trawl survey biomass estimates. A single calibration factor was adopted for the EBS, AI and Gulf of Alaska.

Pacific Ocean Perch: Pacific ocean perch stocks remain markedly lower than the virgin biomass levels of the early 1960s. However, stocks are increasing slowly and are calculated to be slightly below the biomass levels which would yield MSY. In 1991, the Council began managing *S. alutus* separately from the other species in the EBA and AI areas, and also split out rougheye and shortraker in the Aleutians. This was done to avoid excessive catches of the less abundant members of the complex, particularly shortraker and rougheye.

Other rockfishes: The "other rockfish" complex includes both the thornyhead species (*Sebastolobus*) and all *Sebastes* species not included in the POP complex. Observers have identified 15 confirmed species within this complex, and another 14 species have been tentatively identified. Few biological data are available on these species and recent catches have been primarily incidental. Trawl surveys suggest that abundance is stable.

Atka mackerel: Absolute abundance of this species is difficult to assess for three reasons: (1) the stock tends to occur in localized concentrations, (2) surveys covering the stocks range in the Aleutian Islands region occur only every three years, and (3) two of the last three surveys were unable to sample shallow waters successfully. Beginning last year, the stock synthesis approach was applied to the assessment of Atka mackerel. Both last year's and this year's assessments indicate that biomass is much higher than was believed prior to 1991. Relative abundance apparently remains average, but is declining. Because of the possibility of local depetion, the Council recommended splitting the BS/AI area into three districts for the purposes of apportioning the Atka Mackerel ABC and TAC.

Squid: There is insufficient information to estimate biomass and appropriate exploitation rates for squid stocks. ABC is based on historical catch rates and is conservative.

Other species: This category consists largely of sculpins and skates. Pelagic species such as smelt and sharks may be substantially underestimated by the demersal trawl surveys. While overall abundance is high and increasing, ABC is based on historical catch and is conservative.

Allocation of Total Allowable Catches

At the beginning of the fishing year (the calendar year), after TAC is determined for each species or group, an unspecified reserve is set aside to accommodate unexpected growth of the domestic fishery, to correct operational problems in the fisheries, to adjust species TACs according to stock conditions, and for further apportionments. The reserve equals the sum of 15% of each target species and "other species" category TAC. The reserve is not designated by species and will be apportioned to the fishery during the year by the Regional Director in the amounts and by species that he determines necessary.

The remaining 85% of each TAC is apportioned to the fishery as follows: Highest priority is to DAP, the catch by U.S. fishermen delivered to U.S. shoreside or floating processors (including U.S. catcher/processors) or to U.S. nonprocessed bait markets. Second priority is to JVP, U.S. fishermen delivering to foreign processors. Lowest priority is to TALFF, the catch by foreign fishermen. The estimated total catch by U.S. fishermen is DAH. Therefore:

DAH = DAP + JVP
Reserve = 15% TAC
TALFF = TAC - Reserve - DAH

Initial DAP and JVP are determined annually by the Regional Director in consultation with the Council, and equal the amounts harvested by U.S. fishermen the year before plus any supplement needed to satisfy the U.S. fishery for the new fishing year. The supplement is based on surveys conducted by the National Marine Fisheries Service, recommendations from the Council, and information provided by the domestic fishing industry and other agencies. The Regional Director, upon recommendation by the Council, publishes a rule-related notice in the Federal Register proposing apportionments of each TAC among DAP, JVP, and TALFF as soon as practicable after October 1, and allows for 30 days of public comment. Based on comments received, a second notice of final apportionments is published as soon as practicable after December 15. See Table 1 for initial harvest allocations.

Since 1990, the Council has recommended that all TAC be allocted to the domestic fishery. No joint venture fisheries have been approved, so the groundfish fishery has been wholly U.S.-processed since 1990.

Reapportionment of Reserves. Reserve apportionments to target or other species must be consistent with recent assessments of resource conditions, unless the Regional Director finds that socioeconomic considerations or operational problems dictate otherwise. Socioeconomic factors can be considered by the Regional Director in a reserve release for the sole purpose of justifying an apportionment which exceeds a species TAC. He may withhold reserves for conservation reasons, but not for socioeconomic reasons. The Regional Director must also find that the release will not result in overfishing.

On April 1, June 1, August 1, and on any other date deemed appropriate, the Regional Director shall release reserves to DAH so long as the release will not lead to overfishing, and will not adversely affect conservation of groundfish or prohibited species. This reapportionment of reserves to DAH shall be based on and consistent with the biological and socioeconomic considerations made in the determination of TAC.

Sablefish Allocations by Gear Type. Sablefish in the Bering Sea will be allocated 50% to fixed gear and 50% to trawl gear; in the Aleutian Islands, sablefish will be allocated 75% to fixed gear and 25% to trawl gear.

Seasonal Allowances of Pollock TAC

The Council may divide the pollock TAC into allowances to be taken during the roe (January 1 - April 15) and non-roe (June 1 - December 31) seasons. There will be no directed fishing for pollock during the period April 16 through May 31. Division of the pollock TAC into seasonal allowances will be made during the Council's September/December groundfish specifications process.

Pollock Harvest Quota in the Bogoslof District

Pollock taken near Bogoslof Island early in the year are believed to be of the Aleutian Basin stock. This stock has been the object of an intensive, unregulated fishery waters outside U.S. jurisdiction (the Central Bering Sea "donut hole"). To afford protection to this stock, the Council created

Statistical Area 518, the Bogoslof Area (a portion of old Statistical Area 515) for which a pollock harvest quota would be annually specified.

Inshore/Offshore Allocation and Community Development Quotas

The Pollock TAC in the BS/AI, after subtraction of the reserve, is allocated between inshore and offshore compenents beginning in 1992 and lasting through the 1995 season. The inshore component receives 35 percent of the TAC, and the offshore component receives 65 percent. A special catcher vessel operational area was established south of 56■ N latitude between 168■ and 163■ W longitude within which the offshore component is prohibited from fishing for pollock during the "B" season.

Half of the amount of BSAI pollock assigned to the nonspecific reserve for the years 1992 - 1995 will be made available for allocation to qualifying community development projects in westen Alaska (CDQ fisheries).

Total Allowable Catch Closures

The Regional Director may close an area in whole or part to directed fishing for a species whose remaining TAC is needed as bycatch in other directed fisheries. He can accomplish this through notice in the Federal Register. If directed fishing is prohibited, the species may be retained in amounts less than what would constitute directed fishing. Standards for directed fishing are summarized below.

If a TAC is fully reached, the Regional Director will publish a notice declaring that species as prohibited and it must be discarded. If continued fishing on other species may constitute a threat of overfishing on a species whose TAC is exhausted, the Regional Director has the authority to stop the other directed fisheries or require gear adjustments.

In taking such action, the Regional Director must consider:

1. Risk of biological harm to the species whose TAC has been reached.
2. Risk of socioeconomic harm to authorized users of the species for which TAC has been reached.
3. Impacts of a continued closure on the socioeconomic well-being of other domestic fisheries.

Prohibition on Pollock Roe-Stripping

The Council has prohibited the practice of roe-stripping of pollock (defined as the taking of roe from female pollock and the subsequent discard of the carcasses of females and all male pollock), and authorized the Regional Director to issue regulations to limit this practice to the maximum extent practicable. It is the Council's policy that the pollock harvest shall be utilized to the maximum extent possible for human consumption.

Standards for Directed Fishing

1. Using pelagic trawl gear for groundfish species closed to directed fishing. The operator of a vessel is engaged in directed fishing for groundfish for which directed fishing is closed if he

retains at any time during a trip an aggregate amount of these groundfish species or species groups caught with pelagic trawl gear equal to or greater than 7 percent of the amount of other fish or fish products retained on the vessel at the same time during the same trip.

2. Using trawl gear for yellowfin sole, "other flatfish," or arrowtooth flounder. The operator of a vessel is engaged in directed fishing for yellowfin sole, "other flatfish," or arrowtooth flounder if he/she retains at any time during a trip an aggregate amount of yellowfin sole, "other flatfish," and arrowtooth flounder caught using trawl gear equal to or greater than a total of:

   (a) 35 percent of the amount of rocksole retained at the same time on the vessel during the same trip, plus

   (b) 20 percent of the total amount of other fish species (besides rock sole, yellowfin sole, "other flatfish," and arrowtooth flounder) retained at the same time by the vessel during the same trip.

3. Using trawl gear for sablefish, Greenland turbot, and rockfish of the genera Sebastes and Sebastolobus. The operator of a vessel is engaged in directed fishing for sablefish, Greenland turbot, or rockfish if he/she retains at any particular time during a trip an amount of any one of these species caught using trawl gear equal to or greater than the following:

   (a) For sablefish, 10 percent of the amount of all Greenland turbot and rockfish retained at the same time on the vessel during the same trip; plus 1 percent of the total amount of other fish species retained at the same time by the vessel during the same trip.

   (b) For Greenland turbot, 10 percent of the total amount of all sablefish and rockfish retained at the same time on the vessel during the same trip; plus 1 percent of the total amount of other fish species retained at the same time by the vessel during the same trip.

   (c) For the aggregate amount of rockfish target species categories for which a directed fishing closure applies, 10 percent of the total amount of all sablefish, Greenland turbot, and other rockfish target species categories for which directed fisheries are open that are retained at the same time on the vessel during the same trip plus 1 percent of the total amount of other fish species retained at the same time on the vessel during the same trip.

4. Using hook-and-line gear for sablefish, Pacific cod, or Greenland turbot. The operator of a vessel is engaged in directed fishing for sablefish, Pacific cod, or Greenland turbot if he/she retains at any particular time during a trip an amount of these species caught using hook-and-line gear in an amount equal to or greater than the following:

   (a) For sablefish, 10 percent of the amount of all Greenland turbot and rockfish retained at the same time on the vessel during the same trip; plus 1 percent of the total amount of other fish species retained at the same time on the vessel during the same trip.

(b) For Pacific cod, 1 percent of the total amount of all other fish species retained at the same time on the vessel during the same trip.

(c) For Greenland turbot, 20 percent of the amount of all sablefish retained at the same time on the vessel during the same trip; plus 1 percent of the total amount of other fish species retained at the same time on the vessel during the same trip.

5. Using pot gear for sablefish or Pacific cod. The operator of a vessel is engaged in the directed fishing for sablefish or Pacific cod if he/she retains at any particular time during a trip an amount of any one of these species caught using pot gear in an amount equal to or greater than 1 percent of the total amount of other fish species retained at the same time on the vessel during the same trip.

6. Other. Except as provided under paragraphs 1 through 5 of this section, the operator of a vessel is engaged in the directed fishing for a specific species or species group if he retains at any particular time during a trip that species or species group in an amount equal to or greater than 20 percent of the amount of all other fish species retained at the same time on the vessel during the same trip.

The operator of a vessel is engaged in a single fishing trip in an area from the commencement of, or continuation of, fishing after the effective date of a notice prohibiting directed fishing in the area until:

(a) The end of a weekly reporting period;
(b) The vessel enters or leaves an area to which a directed fishing prohibition applies; or
(c) Until any offload or transfer of any fish or fish product from that vessel, whichever occurs first.

Inseason Adjustments

The Secretary of Commerce, acting through the Regional Director, is authorized to make three types of inseason adjustments:

1. Modify seasons in part or all of a management area.
2. Modify allowable gear in all or part of a management area.
3. Adjust TAC and PSC limits.

It must be determined first, however, that the adjustment is necessary to:

1. Prevent overfishing of any species, finfish or shellfish; or
2. Prevent further harvest of a target groundfish species or bycatch of a prohibited species because the TAC or PSC has been found, scientifically, to be misspecified.

In choosing whether to modify seasons or gears, the Regional Director must use the least restrictive action of the following which will still serve the purpose:

1. A gear modification which would protect a species needing conservation but still allow other fisheries to continue.
2. A time/area restriction which would allow other fisheries to continue in noncritical areas and times.

3. A complete closure of an area to all groundfish fishing.

Adjustments of TAC or PSC must be reasonably related, on the basis of the best scientific information, to a change in the biological status of the stocks. The following factors may be considered:

1. Effects of overall fishing effort.
2. Catch per unit of effort and rate of harvest.
3. Relative stock abundance and condition.
4. Economic impacts.
5. Any other factor relevant to conservation and management.

Any proposed adjustment must have been published in the Federal Register for 30 days public comment, unless this is waived for good reason. If waived, a 15-day public comment period will be allowed after the adjustment.

Some inseason adjustments may require additional analysis of impacts on the fishing industry or the resource to satisfy the Regulatory Flexibility Act, Executive Order 12291, and other applicable law.

Prohibited Species and Marine Mammal Protection

1. CRAB AND HALIBUT

Prescribed bottom trawl fisheries in specific areas are closed when prohibited species catch (PSC) limits of C. bairdi Tanner crab, red king crab, and Pacific halibut are taken.

Overall PSC limits are:

C. bairdi crab:	1,000,000 crabs in Zone 1 to close Zone 1 3,000,000 crabs in Zone 2 to close Zone 2
Red king crab:	200,000 crabs in Zone 1 to close Zone 1
Pacific halibut:	3,300 mt mortality in BS/AI to close Zone 1 and Zone 2H 3,775 mt mortality in BS/AI to close entire BS/AI

The bycatch limits are apportioned to the following six fisheries in proportion to their anticipated bycatch "need": 1) Yellowfin sole, 2) Rock sole/"other flatfish", 3) Turbot/arrowtooth flounder/salblefish, 4) Rockfish, 5) Pacific cod, and 6) Pollock/Atka Mackerel/"other species".

2. HERRING

The Council has adopted an amendment [16a] which establishes a framework for determining an annual herring PSC at 1% of the estimated eastern Bering sea herring biomass. The herring PSC cap will be apportioned among fisheries expected to take herring as bycatch and attainment of a herring PSC apportionment will trigger trawl closures in two Herring Summer Savings Areas north of the Alaska peninsula and a Herring Winter Savings Area northwest of the Pribilof Islands to the affected fishery. These Herring Savings Areas are depicted in Figure 2.

3. WALRUS

To protect walrus, no fishing is allowed during April 1 through September 30 in 1990 and 1991 in that part of the Bering Sea within twelve miles of Round Island, the Twins and Cape Peirce in northern Bristol Bay. This measure sunsets December 31, 1991 and the Council will consider whether to extend these seasonal closures during its 1991 plan amendment cycle.

4. STELLER SEA LIONS

No trawling is allowed year round in the BS/AI within 10 nautical miles of 27 Steller sea lion rookeries. In addition, six of these rookeries will have 20 nautical mile trawl closures during the pollock "A" season. These closures will revert back to 10 nautical miles when the "A" season is over, either on or before April 15.

Recordkeeping and Reporting Requirements

Landings in Alaska. Fishing vessel operators or, if requested, the purchasers of the catch, must report the catch on ADF&G fish tickets within one week of the landing.

Landings Outside Alaska. Landings to other states or outside the EEZ must be reported on ADF&G fish tickets or the equivalent within one week of the landing.

Catcher/Processor and Mothership/Processor Vessels. These operators are required to have a federal permit and must also submit ADF&G fish tickets or the equivalent within one week of transferring fish. They are also subject to the following requirements:

- Processing is defined as the preparation of fish to render it suitable for human consumption, industrial uses, or long-term storage, including but not limited to cooking, canning, smoking, salting, drying, freezing, and rendering into meal or oil, but does not mean heading and gutting unless additional preparation is done.

- Any fishing vessel that processes under the above definition must give NOAA Fisheries 24-hour advance notice of the date, hour, and position of starting or stopping fishing or receiving groundfish in any management area. After notification of starting fishing, these vessels also must submit weekly, Sunday through Saturday, catch/receipt and product transfer reports to NOAA Fisheries within seven days of the end of the reporting period. This report is required even if no fish were caught or received. These reports shall include vessel name, call sign, federal permit number, time fished, round weight of fish caught or received at sea, area of catch, number and weight of cartons of processed fish produced, product weight (to nearest 0.1 mt), and number of cartons off-loaded.

- The vessel must also maintain a cargo transfer/off-loading log of all fish transferred anywhere.

New Record keeping and reporting requirements were implemented for the 1990 fishing year to permit the collection of biological and economic information from the fishery necessary to appropriate management.

Further changes in recordkeeping and reporting requirements will be made by regulatory amendment.

Changes in Recordkeeping Requirements.

- All processors, floating and shorebased, must maintain a daily cumulative production log (DCPL).

- Each vessel larger than 5 net tons that harvests groundfish off Alaska must maintain a daily fishing log (DFL).

- Each shoreside processor must maintain a transfer log (TL) similar to that currently required of at-sea processors.

Changes in Reporting Requirements.

- Each processor required to maintain a transfer log is required to submit to NOAA Fisheries a weekly summary of transfer log entries for each week in which transfers occur.

- The weekly catch report in round weight for each at-sea processor is replaced with a weekly production report (WPR) in product weight.

- Each shoreside processor is required to submit a weekly production report.

- Each processor and catcher vessel required to maintain a DCPL and/or DFL is required to submit to NOAA Fisheries a copy of their DCPL and/or DFL records on a quarterly basis.

- Each processor (at-sea and shoreside) or its parent company is required to submit a monthly product value report (MPVR) on an annual basis.

Domestic Observers

A domestic observer program was implemented beginning with the 1990 fishing year. Observers collect biological and catch and discard information which complements the revised recordkeeping and reporting requirements. All vessels capable of hosting an observer may be required to do so at the host vessel's expense. As currently implemented, vessels over 125 feet length overall (LOA) are required to have an observer on-board at all times when groundfishing, vessels of 60 - 124 ft. LOA are required to have observers on-board 30% of the time, and vessels under 60 ft. LOA are generally exempt from the requirements for observer coverage.

State Trawl Closures

Effective November 9, 1987 the Board of Fisheries closed the following areas of the westward area to the taking of groundfish:

1. Joint venture fisheries are prohibited in state waters unless a specific permit is obtained from the state allowing their operation.

2. In the area south of the latitude of Cape Newenham (58° 39' N. lat.) and north of the latitude of Cape Sarichef (54° 36' N. lat.), bounded on the west by 168° W. longitude and on the east by the Alaska Peninsula including all of Bristol Bay, the following restrictions apply:

Table 1. Bering Sea/Aleutian Islands Groundfish
Council Recommended Groundfish Specifications for 1993 (in metric tons)

Species	Area	Seasons\1	ABC	TAC	ITAC\2	Seasonal Allowances	DAP	CDQ\3
Pollock	EBS		1,340,000	1,300,000	1,105,000		1,105,000	97,500
		Roe			497,250	45%	497,250	43,875
		Non-Roe			607,750	55%	607,750	53,625
	AI	\4	58,700	51,600	43,860		43,860	3,870
	518		42,000	1,000	850		850	75
					0		0	
Pacific cod	BS/AI		164,500	164,500	139,825		139,825	
					0		0	
Yellowfin sole	BS/AI		238,000	220,000	187,000		187,000	
					0		0	
Greenland turbot	BS/AI		7,000	7,000	5,950		5,950	
					0		0	
Arrowtooth flounder	BS/AI		72,000	10,000	8,500		8,500	
					0		0	
Rock sole	BS/AI		185,000	75,000	63,750		63,750	
					0		0	
Other flatfish	BS/AI		191,000	79,000	67,150		67,150	
					0		0	
Sablefish	EBS		1,500	1,500	1,275		1,275	
	AI		2,600	2,600	2,210		2,210	
					0		0	
POP complex					0		0	
True POP	EBS		3,330	3,330	2,831		2,831	
Other POP complex	EBS		1,400	1,200	1,020		1,020	
True POP	AI		13,900	13,900	11,815		11,815	
Sharp/Northern	AI		5,670	5,100	4,335		4,335	
Short/Rougheye	AI		1,220	1,100	935		935	
					0		0	
Other rockfish	EBS		400	360	306		306	
	AI		925	830	706		706	
					0		0	
Atka mackerel	BS/AI		117,100	32,000	27,200		27,200	
					0		0	
Squid	BS/AI		3,400	2,000	1,700		1,700	
					0		0	
Other species	BS/AI		26,600	26,600	22,610		22,610	
					0		0	
BS/AI TOTAL			2,476,245	1,998,620	1,698,827		1,698,827	101,445

\1 Roe season for BSAI Pollock: January 20 to April 15.
Non-Roe Season, pending approval of a regulatory amendment: August 15 to December 31, otherwise will start June 1.

2\ Recommended TAC less the 15% Reserve

3\ CDQs equal half of the reserve for Pollock, or 7.5% of the BSAI pollock TAC.

4\ The Council did not divide the Aleutian Islands pollock TAC into roe and non-roe allowances.

Annual Management Cycles for Groundfish and Halibut*
(Day of month in parentheses)

	Groundfish	Halibut
JULY	(1) Solicit Groundfish Proposals	
AUG	(20) Proposal Deadline. Staff review of proposals.	(15) Solicit Halibut Proposals
SEP	(5) Plan Team Review of Proposals. Plan Amendment Advisory Group (PAAG) review of proposals. Teams prepare preliminary Stock Assessment and Fishery Evaluation (SAFE) Report. Council meeting: Initial consideration of harvest levels and apportionments. Initial review of proposals and direction to teams.	(15) Deadline for Proposals. Team Review. (17) Regulatory Amendment Adv. Group Review.
NOV	Public review of initial harvest and apportionment specifications. Teams update SAFE. Teams develop proposal alternatives. Begin analysis.	Preliminary IPHC meeting.
DEC	Council Meeting: Final determination on harvest level and apportionments.	Council Meeting: Final Action. (20) Forward to Secretary of Commerce (SOC)
FEB	Team: Amendment analysis continues.	(2) SOC prepares Final Rulemaking Notice (FRN).
MAR	30-day Advance review by SSC and AP.	(10) FRN published.
APR	Council Meeting: Send proposals and analysis to public review.	(10) Final rule takes effect along with IPHC rules.
MAY	Public Review.	
JUNE	Council Meeting: Final approval of amendments.	
JULY	Submit to SOC.[1]	

[1] If approved, amendment takes effect in mid- to late November.
*Approved by the Council in June 1990.

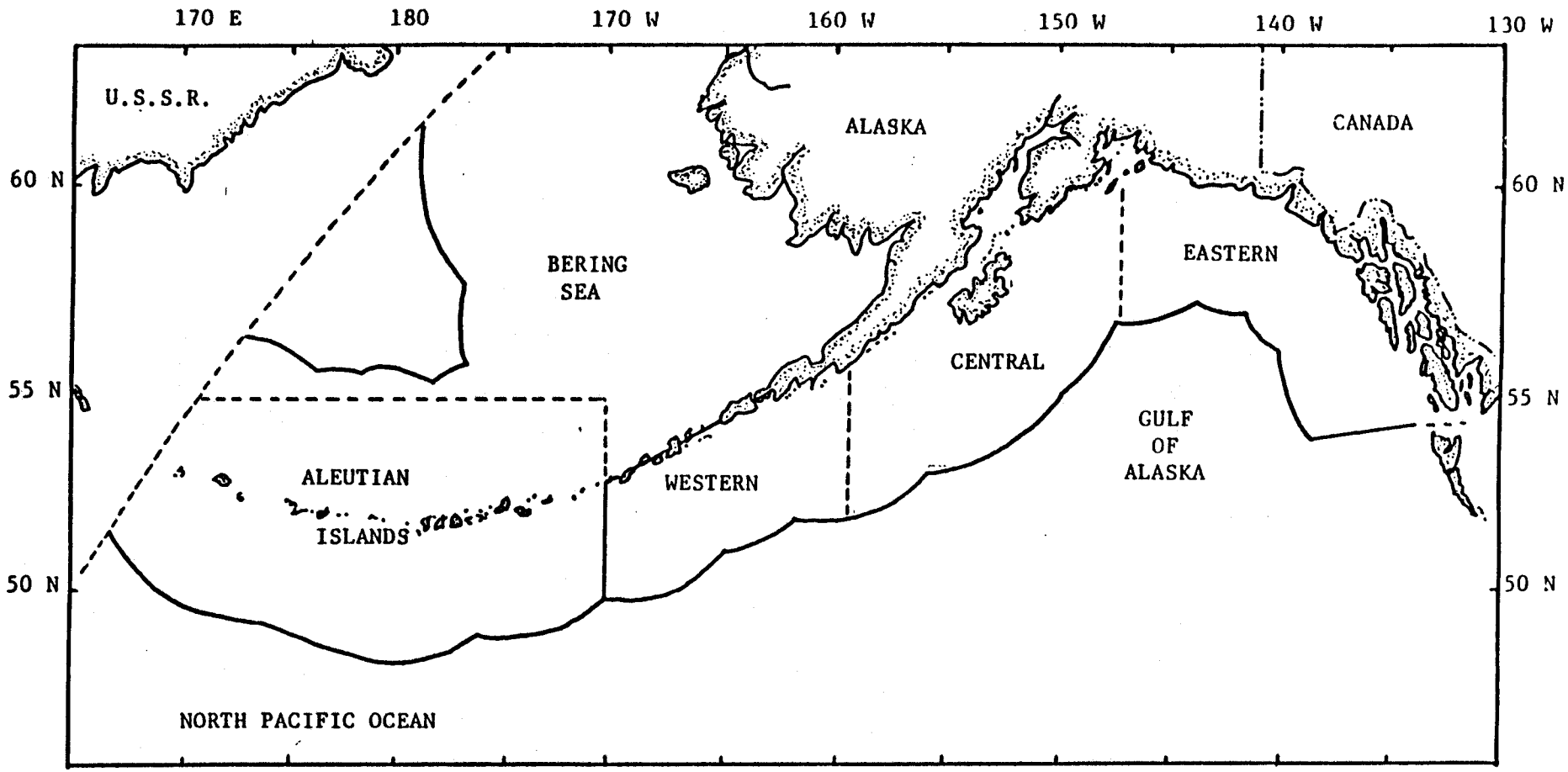


Fig. 1 Major regulatory areas of the Bering Sea and Aleutian Islands Groundfish and Gulf of Alaska Groundfish FMP's.

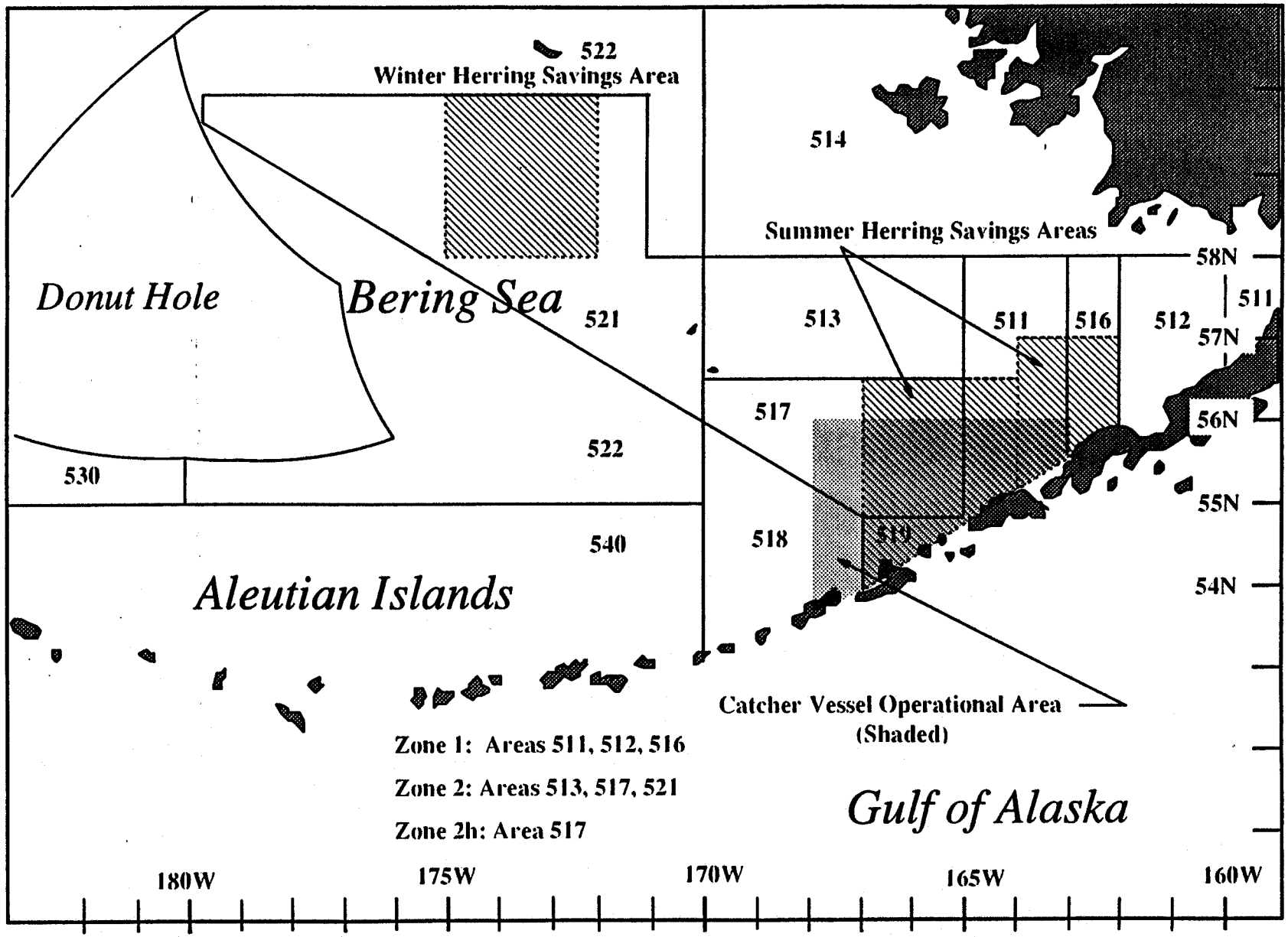
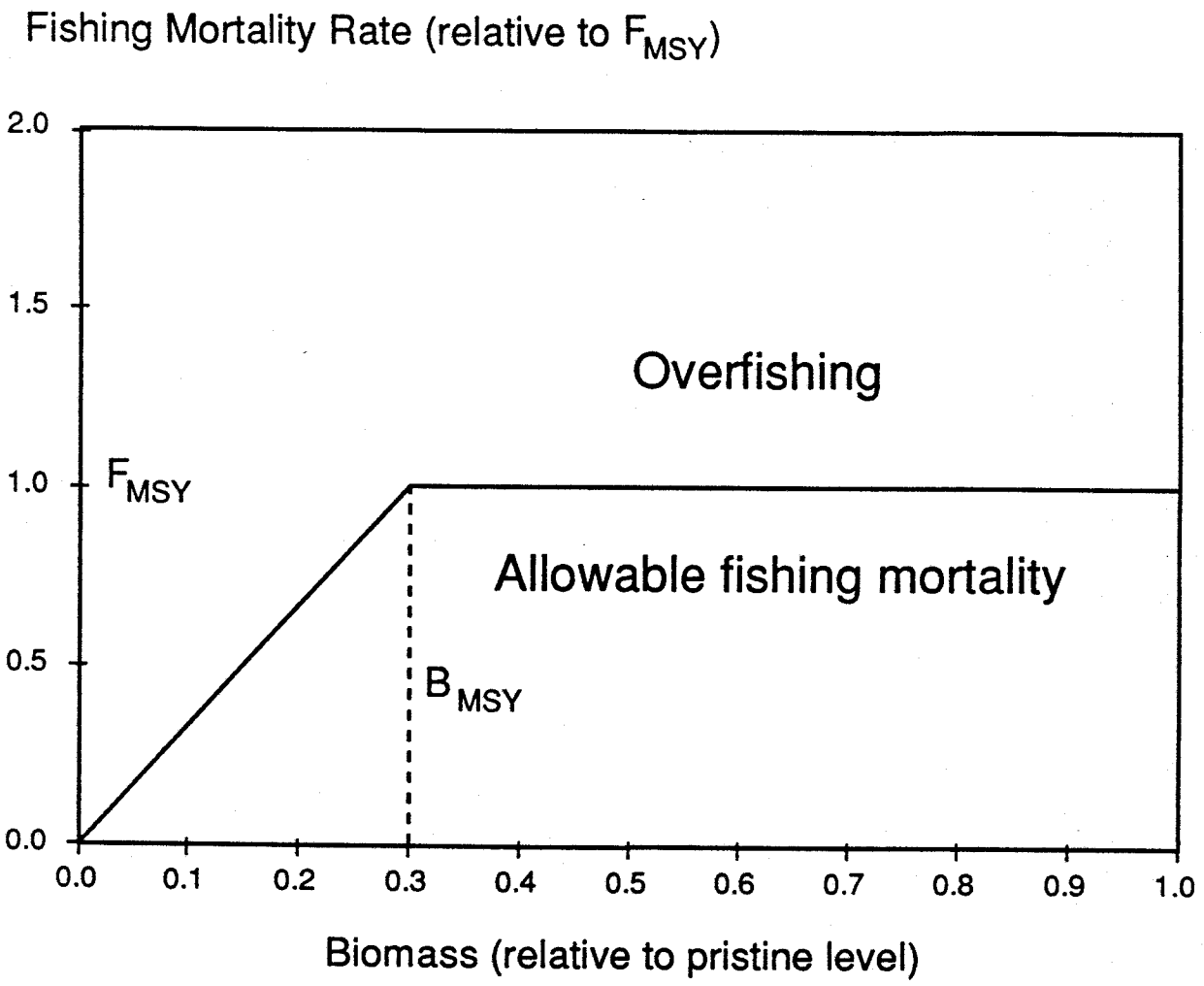


Figure 2. Statistical reporting areas and bycatch limitation zones in the Bering Sea and Aleutian Islands Management Area

Figure 3


Fishing Mortality Rate (relative to F_{MSY})
2.0
1.5
1.0
0.5
0.0
F_{MSY}
Overfishing
Allowable fishing mortality
B_{MSY}
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Biomass (relative to pristine level)

Amendment 21 on March 17, 1993:

1. Established Pacific halibut bycatch limits in terms of halibut mortality rather than halibut bycatch.

2. Established Pacific halibut bycatch mortality limits for trawl and non-trawl gear fisheries in regulations rather than in the FMP. The Council adopted a 3,775 mt halibut bycatch mortality limit for trawl gear and a 900 mt mortality limit for the non-trawl gear fisheries.

3. Established the authority to annually apportion the non-trawl halibut bycatch mortality limit among fisheries and seasons as bycatch allowances. Exempted pot gear for 1993.

Amendment 22 on Decemeber 22, 1992:

1. Established trawl test areas for the testing of trawl gear in preparation of the opening of fishing seasons. Fishermen are allowed to test trawl gear when the GOA or BSAI would otherwise be closed to trawling. The one test area in the BSAI is bounded by straight lines connecting the following coordinates:

W. longitude	N. latitude
167 degrees 00 minutes	55 degrees 00 min
166 degrees 00 minutes	55 degrees 00 min
166 degrees 00 minutes	54 degrees 00 min
167 degrees 00 minutes	54 degrees 00 min
167 degrees 00 minutes	55 degrees 00 min

Plan Amendments (implementation pending as of May 1993):

Amendment 23	Moratorium on entry into federally managed BSAI groundfish and crab fisheries.
Amendment 25	Bycatch (PSC) apportionments to the Inshore, Offshore and CDQ sectors.
Amendment 26	Exclusive registration for vessels fishing in the BSAI or GOA groundfish fisheries.
Amendment 27	North Pacific Fisheries Research Plan (Observer fees).
Amendment 28	Establish three districts in the Aleutian Islands management area (540) for purposes of distributing the groundfish TACs spacially.

Regulatory Amendments (implementation pending):

1. 1993 record keeping and reporting requirements.
2. Definition of legal gear types.
3. Performance based pelagic trawl definitions.
4. Prohibit landing of undersized halibut from beyond EEZ and require offloading of PSC species caught beyond EEZ.

Groundfish Plan Amendment Cycle

At its June 1990 meeting, the Council modified its groundfish plan amendment cycle. Public proposals for groundfish plan amendments will now be due during the summer. The Groundfish Plan Teams and the Plan Amendment Advisory Group will meet to review and prioritized the proposals in early September. The Council will then select proposals for analysis and development as possible plan amendments during its September meeting. Draft analyses will be reviewed by the Council at its April meeting, public review will take place between the April and June meetings, and the Council will take final action at its June meeting. Amendments adopted by the Council would then be submitted to the Secretary of Commerce for review and approval and would be implemented for the following fishing year. Attachment A depicts the new plan amendment cycle.

Regulatory Amendment on July 2, 1991

1. Modification of observer program requirements.

Amendment 17 on April 24, 1992:

1. Authorize the NMFS Regional Director to approve experimental fishing permits after consultation with the Council.

2. Establish permanently the Walrus Islands seasonal groundfish fishery closures in the Bering Sea and Aleutians groundfish plan, including 12-mile buffer zones around three haul-out sites in northern Bristol Bay. Closures occur April 1 - September 30. It is the Council's intent to review these closures after five years.

3. Establish a unique Bogoslof District (new Area 518) for which a pollock harvest quota would be annually specified. Fishing for pollock in new Area 519 and other reporting areas of the Bering Sea will be unaffected by any closure of the Bogoslof District.

4. Require groundfish pots to be identified by some form of tag (regulatory amendment).

Amendment 18 on June 1, 1992 and revised Amendment 18 on December 18, 1992:

1. The Pollock TAC in the BS/AI, after subtraction of the reserve, is allocated between inshore and offshore compenents during the years 1992 through 1995. The inshore component receives 35 percent of the Pollock TAC, and the offshore component receives 65 percent.

2. A Catcher Vessel Operational Area (CVOA) is established to limit access to pollock within the area to catcher vessels delivering to the inshore component. This area is between 163° and 168° W. longitude, south of 56° N latitude, and north of the Aleutian Islands. During the 1992 "B" season, the offshore component will not be allowed to fish within the CVOA.

3. Half of the amount of BS/AI pollock assigned to the nonspecific reserve (7.5 percent of the BS/AI TAC) is allocated as Western Alaska Community Development Quota (CDQ).

Amendment 19 on September 23, 1992:

1. Revise time/area closure (hotspot) authority in the BS/AI to authorize, by regulatory amendment, the establishment of time/area closures to reduce bycatch rates of prohibited species. Any closure of an area would require a determination by the Secretary, in consultation with the Council.

2. Expand the Vessel Incentive Program (VIP) to include all trawl fisheries in the BS/AI.

3. Delay opening of all trawl fisheries in the BS/AI until January 20. The opening date for non-trawl fisheries, including hook and line, pot and jigging, will continue to be January 1.

4. Establish, for the 1992 season only, a halibut PSC limit of 5,033 mt for the BS/AI trawl fishery. Also, a 750 mt halibut PSC mortality limit for the non-trawl fisheries will be established for one year.

5. Establish new halibut and crab PSC apportionment categories. A trawl fishery category closes when it reaches a PSC bycatch allowance allocated to that category.

6. Establish new fishery definitions. The fishery definitions for both the Vessel Incentive Program and the PSC allowance limits would be the same. The definitions of fisheries for these programs would be as follows:

   A. Mid-water pollock if pollock is $\geq$ to 95% of the total catch.

   B. Other targets determined by the dominate species in terms of retained catch.

   C. For the BS/AI, a flatfish fishery consisting of rocksole, yellowfin sole, and other flatfish (excluding Greenland turbot and arrowtooth flounder) will be defined and then subdivided into three fisheries. If yellowfin sole accounts for at least 70% of the retained flatfish catch, it is a yellowfin sole fishery. Otherwise, it is a rock sole or other flatfish fishery depending on the which is dominant in terms of retained catch.

7. To allow more effective enforcement of directed fishery closures and to further limit trawl bycatch amounts of halibut after a halibut PSC bycatch allowance has been reached, changes to Directed Fishing Standards include:

   A. Directed fishing standards would be seven percent of the aggregate amounts of GOA and BS/AI groundfish other than pollock, that are caught while fishing for pollock with pelagic trawl gear.

   B. For purposes of the directed fishing rule, the operator of a vessel is engaged in a single fishing trip, from the date when fishing commences or continues in an area after the effective date of a notice prohibiting directed fishing in that area, until the first date on which at least one of following occurs: (1) a weekly reporting period ends; (2) the vessel enters or leaves a reporting area for which an area specific TAC or directed fishing standard is established; or (3) any fish or fish product is offloaded or transferred from that vessel.

Amendment 20 on January 19, 1992:

1. Prohibit trawling year round in the BS/AI within 10 nautical miles of 27 Steller sea lion rookeries. In addition, five of these rookeries will have 20 nautical mile trawl closures during the pollock "A" season. These closures will revert back to 10 nautical miles when the "A" season is over, either on or before April 15.

Regulatory Amendments implemented in 1992:

1. Require groundfish pots to be fished on single lines.
2. 1992 record keeping and reporting requirements.
3. Establishment of Product Recovery Rates.

Amendment 12 on May 26, 1989:

1. Required all vessels receiving groundfish from the EEZ to hold a federal permit and thereby conform to federal reporting requirements.

2. Established a prohibited species catch (PSC) limit framework for fully U.S. harvested species applicable to JVP and TALFF fisheries.

3. Removed a July 1 deadline for the annual Stock Assessment & Fishery Evaluation document (SAFE).

4. Separated rock sole from the "other flatfish" species group.

Amendment 12a on July 7, 1989:

Established prohibited species catch (PSC) limits for C. bairdi Tanner crab, red king crab, and Pacific halibut applicable to DAP and JVP bottom trawl fisheries for flatfish and other groundfish species. Amendment is intended for 1989, and possibly 1990.

Amendment 13 on November 1, 1989:

1. Allocated sablefish TAC by gear type in the Bering Sea and Aleutian Islands.

2. Established a procedure to set fishing seasons on an annual basis by regulatory amendment.

3. Closed waters on a seasonal basis surrounding Round Island, The Twins and Cape Peirce to groundfish fishing.

4. Clarified the authority of the Secretary of Commerce to combine or split species or species groups within the target species category.

5. Established a frameworked observer program of up to 100% coverage on domestic fishing and/or processing vessels and shorebased processing plants.

6. Approved new recordkeeping and data reporting requirements.

Regulatory Amendments on January 26, 1990:

1. Authorized the reopening of prematurely closed fisheries.

2. Required fishermen to mark buoys used in pot and hook-and-line fisheries.

3. Made 12:00 noon Alaska local time the starting and ending time for groundfish fishing other than the beginning and end of the calendar fishing year.

Regulatory Amendments on April 12, 1990:

Revised the directed fishing definition to one based on retention rather than what is initially brought aboard the vessel. Added specific percentage definitions based upon species considered.

Amendment 14 on November 15, 1990:

1. Prohibited the practice of pollock roe-striping (defined as the taking of roe from female pollock and the subsequent discard of the female carcass and all male pollock).

2. Divided the pollock total allowable catch (TAC) into roe (January 1 - April 15) and non-roe (June 1 - December 31) seasonal allowances.

Amendment 16 on January 18, 1991:

1. Extended and modified halibut and crab bycatch management measures, including the adoption of an incentive program to impose sanctions on vessels with excessively high bycatch rates. The vessel incentive program originally adopted by the Council was disapproved by the Secretary. The Council submitted a revised incentive program which was implemented on May 6, 1991.

2. Amended the definition of overfishing.

3. Established interim harvest levels until superseded by publication of final groundfish specifications in the Federal Register.

4. Provided for legal fishing gear to be defined by regulatory amendment.

Amendment 16a on July 12, 1991:

1. Established in-season authority for the Regional Director to temporarily close statistical areas, or portions thereof, to reduce high prohibited species bycatch rates.

2. Authorized the Regional Director, in consultation with the Council, to set a limit on the proportion of the pollock TAC that may be taken with other than pelagic trawl gear.

3. Established a framework for determining an annual herring PSC limit at 1% of the eastern Bering Sea herring biomass. The herring PSC limit will be apportioned among fisheries expected to take herring as bycatch; attainment of a herring PSC apportionment would trigger trawl closures in two Herring Summer Savings Areas north of the Alaska peninsula and a Winter Herring Savings area northwest of the Pribilof Islands.

Regulatory Amendments on January 1, 1991

1. Delayed the yellowfin sole, Greenland turbot, arrowtooth flounder, and other flatfish fisheries opening date to May 1 to reduce crab and halibut bycatch rates.

2. Increased the allowable retention of yellowfin sole, arrowtooth flounder, and other flatfish in the rock sole fishery from 20% to 35% to reduce discards.

Regulatory Amendment on March 1, 1991

1. Modification of the 1991 recordkeeping and reporting requirements.

4. Allowed experimental year-round domestic trawling in the Winter Halibut Savings Area that will be monitored to the extent possible by observers.

5. Allowed year-round domestic trawling in the Bristol Bay Pot Sanctuary and year-round domestic longlining in the Winter Halibut Savings Area.

6. Allowed foreign trawling in Petrel Bank (Area "D") from July 1 to December 31.

7. Established new Annex I which is a description of the Stock Assessment & Fishery Evaluation document.

8. Specified that the fishing and plan year is the calendar year.

Amendment 3 on July 4, 1983:

1. Established procedures for reducing the incidental catch of halibut, salmon, king crab and Tanner crab by the foreign fisheries.

2. Established a Council policy on the domestic fisheries and the incidental catch problem.

Amendment 5 (Withdrawn): Decreased chinook PSC to 45,500 from 55,250 salmon for 1982. (This amendment was withdrawn because it was redundant to Amendment 3.)

Amendment 6 (Disapproved by NOAA Fisheries on December 8, 1983):

1. Established U.S. Fishery Development Zone where no foreign fishing is allowed.

2. Instead of resubmitting the proposed amendment, the Council agreed to the voluntary industry arrangement described in Table 2.

Amendment 7 on August 31, 1983:

Modified the December 1 to May 31 depth restriction on the foreign longline fisheries in the Winter Halibut Savings Area.

Amendment 8 on February 24, 1984:

Set salmon PSCs for 1984 and 1985.

Amendment 9 on December 1, 1985:

1. Closed areas west of 170° W. within 20 miles to foreign trawling year round. (Disapproved by NOAA Fisheries.)

2. Required all catcher/processors that hold their catch for more than two weeks to check in and check out by radio from a regulatory area/district and to provide a written catch report weekly to the NOAA Fisheries Regional Office.

3. Incorporated habitat protection policy. (A proposed regulation authorized by this part of Amendment 9 is reserved until an analysis of the measure is prepared.)

4. Established definition for directed fishing as 20% or more of the catch.

Amendment 10 on April 12, 1987:

1. Closed an area in Bering Sea to trawling and set PSC limits on crabs and halibut.

2. Required weekly catch or receipt reports from catcher/processors.

3. Authorized reapportionments between DAP and JVP.

4. Authorized Regional Director to make inseason adjustments.

NOAA Fisheries Regulatory Amendment on April 13, 1987:

1. Allowed the NOAA Fisheries Regional Director to prohibit directed fishing by U.S. fishermen for species for which the remaining TAC is needed as bycatch.

2. Required U.S. fishermen to treat species as prohibited species if TAC is reached.

3. Limits U.S. fishing for groundfish by any method that will prevent overfishing of species whose TAC has been reached.

Amendment 11 on January 4, 1988 (some sections expire December 31, 1989):

1. Revised the definition of prohibited species to specifically name the species to be prohibited in the catches of foreign and domestic fishermen. Steelhead, in addition to Pacific salmon, are added to the prohibited species list for domestic fishermen; all salmonids are prohibited for foreign fishermen.

2. Revised the definition of acceptable biological catch to bring it into conformity with that used by the Pacific Council and includes definitions for "threshold" and "overfishing".
3. Seasonal apportionment (split season) of pollock JVP creates a 40%/60% split in Bering Sea/Aleutians pollock JVP for the periods January 15 - April 15 and April 16 - December 31. This amendment is effective for only 1988 and 1989.

Regulatory Amendment on January 28, 1988:

Modified domestic reporting requirements with respect to State of Alaska fish tickets.

Amendment 11a on April 6, 1988:

Required catcher/processor and mothership/processor vessels to maintain on board a transfer log and to report information weekly about groundfish production and transfer and off-loading of groundfish products.

(a) Trawl fishing for yellowfin sole and other flatfish is prohibited south of 58° N. latitude except that yellowfin sole may be incidentally caught and processed, not to exceed 20% of target species weight by landing.

(b) Sablefish is closed to directed fishing. Incidentally taken sablefish may be retained from all gear except trawl gear. Incidental catch must not exceed 20% of target species weight by landing.

(c) Cod fishing between 160° and 162° W. longitude with trawl gear is prohibited unless a department observer is aboard.

Habitat Protection

The Secretary, upon the recommendation of the Council, may adopt the following types of regulations:

1. Propose regulations establishing gear, time, or area restrictions to protect particular habitats or life stages of species in the Bering Sea/Aleutian Islands groundfish fishery.

2. Propose regulations establishing area or time restrictions to prevent the harvest of fish in contaminated areas.

3. Propose regulations restricting disposal of fishing gear by domestic vessels.

History of Plan

PMP in early 1977.

FMP on January 1, 1982.

Amendment 1a on January 12, 1982:
Set prohibited species catch (PSC) limit on chinook salmon.

Amendment 2 on January 12, 1982:

1. For Yellowfin Sole, increased DAH to 26,200 mt from 2,050 mt, increased JVP to 25,000 mt from 850 mt, and decreased TALFF by 24,150 mt.

2. For Other Flatfish, increased DAH to 4,200 mt from 1,300 mt, increased JVP to 3,000 mt from 100 mt, and decreased initial TALFF by 2,900 mt.

3. For Pacific Cod, decreased MSY to 55,000 mt from 58,700 mt, increased EY to 160,000 mt from 58,700 mt, increased ABC to 160,000 mt from 58,700 mt, increased OY to 78,700 mt from 58,700 mt, increased Reserve to 3,935 mt from 2,935 mt, increased DAP to 26,000 mt from 7,000 mt, and increased DAH to 43,265 mt from 24,265 mt.

Amendment 4 on May 9, 1983:

1. For Pollock, increased JVP for Bering Sea to 64,000 mt from 9,050 mt, increased DAH to 74,500 mt from 19,550 mt, and decreased TALFF to 875,500 mt from 930,450 mt.

2. For Yellowfin sole, increased JVP to 30,000 mt from 25,000 mt, increased DAH to 31,200 mt from 26,200 mt, and decreased TALFF to 79,950 mt from 84,950 mt.

3. For Other Flatfish, increased JVP to 10,000 mt from 3,000 mt, increased DAH to 11,200 mt from 4,200 mt, and decreased TALFF to 46,750 mt from 53,750 mt.

4. For Atka Mackerel, increased JVP to 14,500 mt from 100 mt, increased DAH to 14,500 mt from 100 mt, and decreased TALFF to 9,060 mt from 23,460 mt.

5. For Other Species, increased JVP to 6,000 mt from 200 mt, increased DAH to 7,800 mt from 2,000 mt, and decreased TALFF to 65,648 mt from 68,537 mt. Also corrected ABC to 79,714 mt, OY to 77,314 mt, and reserves to 3,866 mt.

6. For Pacific Cod, increased EY and ABC to 168,000 mt from 160,000 mt, increased OY to 120,000 mt from 78,700 mt, increased Reserves to 6,000 mt from 3,935 mt, and increased TALFF to 70,735 mt from 31,500 mt.

7. For Other Rockfish, assigned DAP of 1,100 mt to BS/AI area combined. This caused no change in total DAP. (This conformed FMP with federal regulations.)

8. For Pacific Ocean Perch, assigned DAP of 550 mt to Bering Sea and 550 mt to Aleutians but caused no change in total DAP. Also assigned JVP of 830 mt to Bering Sea and 830 mt to Aleutians without changing total JVP. (This conformed FMP with federal regulations.)

9. For Sablefish, assigned JVP of 200 mt to Bering Sea and 200 mt to Aleutians without changing total JVP. (This conformed FMP with federal regulations.) Changed MSY to 11,600 mt in Bering Sea and 1,900 mt in Aleutians to eliminate inconsistencies with annexes.

10. Changed foreign fisheries restrictions to allow trawling outside three miles north of the Aleutians between 170° 30' W. and 172° W. and south of the Aleutians between 170° W. and 172° W.; and to allow longlining outside three miles west of 170° W.

11. Established the authority of the Secretary of Commerce to issue field orders for conservation reasons. (Disapproved by Secretary of Commerce.)

Amendment 1 on January 1, 1984:

1. Established a multi-year, multi-species optimum yield for the Bering Sea/Aleutian Islands area groundfish complex.

2. Established a framework procedure for determining and apportioning TAC and Reserves to DAH and TALFF.

3. Eliminated "Misty Moon" grounds south of the Pribilof Islands from the Winter Halibut Savings Area.